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EXAMINER	
WALSH, JOHN B	

ART UNIT	PAPER NUMBER
2151	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,019	TREISTER ET AL.	
	Examiner	Art Unit	
	John B. Walsh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-43 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-43 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/19/05, 7/28/05, 11/15/05, 3/11/03, 12/29/03, 3/12/02
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 38-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 38-43 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 72, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., CD-ROM) and intangible embodiments (e.g., light waves, acoustic waves, radio waves). As such, the claim is not limited to statutory subject matter and is therefore non-statutory. To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media. For the specification, carrier medium and transmission media would be not statutory but storage media would be statutory.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how the first participant is the third participant. Clarification or correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,745,034 to Wang et al.

As concerns claim 1, a method for managing a communications arrangement comprising a plurality of participants, the method comprising the computer-implemented steps of: assigning, to a first participant from the plurality of participants, one or more functions to be performed by the first participant (serving communication station, col. 3, lines 6-10); designating a second participant (another communication station, column 1, line 55) from the plurality of participants to perform the one or more functions if any of one or more handoff criteria are satisfied; in response to any of the one or more handoff criteria being satisfied, assigning the one or more functions to the second participant (column 1, line 60-column 2, line 4); and selecting, based upon performance of a plurality of communications channels and at least one performance criterion, a first communications channel from the plurality of communications channels (column 2, lines 1-3).

As concerns claim 2, the method of claim 1, further comprising the computer implemented steps of: generating channel identification data (inherent for a channel to have identification data, which may be the frequency of the channel) that identifies the first communications channel; and providing the channel identification data to one or more participants from the plurality of participants (data provided when signal is transmitted).

As concerns claim 3, the method of claim 2, further comprising the computer-implemented steps of: receiving at least a first communication from the one or more participants over a second communications channel from the plurality of communications channels (second channel is a channel used for transmission), wherein the second communications channel is determined based on the channel identification data (inherent for a channel to have identification data, which may be the frequency of the channel).

As concerns claim 4, a method for managing, based on performance, a communications arrangement comprising a plurality of participants, the method comprising the computer-implemented steps of: selecting, based upon performance of a plurality of communications channels, a first communications channel (a channel used for communication, column 2, lines 1-3) from the plurality of communications channels; generating channel identification data (inherent for a channel to have identification data, which may be the frequency of the channel) that identifies the first communications channel; providing the channel identification data to one or more participants from the plurality of participants (data provided when signal is transmitted); receiving at least a first communication from the one or more participants over a second communications channel (another channel from available channels, column 2, lines 1-3) from the plurality of communications channels, wherein the second communications channel is determined based on the channel identification data; assigning, to a first participant from the

plurality of participants, one or more functions to be performed by the first participant (serving communication station, col. 3, lines 6-10); prior to a failure of the first participant, designating a second participant (another transceiver, column 1, line 55) from the plurality of participants to perform the one or more functions if any of one or more handoff criteria are satisfied (column 1, line 60-column 2, line 4).

As concerns claim 5, a method for assigning functions between participants and selecting communications channels in a communications arrangement comprising a plurality of participants, the method comprising the computer-implemented steps of: assigning, to a first participant from the plurality of participants, one or more functions to be performed by the first participant (a transceiver station functioning for communication); prior to a failure of the first participant, designating a second participant (another transceiver, column 1, line 55) from the plurality of participants to perform the one or more functions if any of one or more criteria are satisfied (column 1, line 60-column 2, line 4); in response to any of the one or more criteria being satisfied, assigning the one or more functions to the second participant (column 1, line 60-column 2, line 4); selecting, based upon performance of a plurality of communications channels and at least one specified criterion, a first communications channel (a channel used for communication, column 2, lines 1-3) from the plurality of communications channels; generating channel identification data (inherent for a channel to have identification data, which may be the frequency of the channel) that identifies the first communications channel; providing the channel identification data to one or more participants from the plurality of participants (data provided when signal is transmitted); and receiving at least a first communication from the one or more participants over a second communications channel from the plurality of communications channels, wherein the second communications channel is determined based on the channel

identification data (another channel from available channels, column 2, lines 1-3; or channel used by second participant).

As concerns claim 6, the method as recited in claim 5, wherein communications between the plurality of participants are made on different frequencies over time (inherent, communication occurs over channels which are a range of frequencies, wherein at particular points in time the frequency of the communications will not be identical).

As concerns claims 7 and 29, wherein the communications arrangement includes a wireless communications arrangement and the plurality of participants includes a plurality of wireless devices (column 1, lines 49-51, radio and cellular, column 1, line 66, mobile station).

As concerns claim 8, the method of claim 5, wherein the channel identification data is first channel identification data, and wherein the method further comprises the computer-implemented steps of: selecting, based upon the performance of the plurality of communications channels and the at least one specified criterion, a third communications channel (column 2, lines 1-3, another channel) from the plurality of communications channels; generating second channel identification data (inherent for a channel to have identification data, which may be the frequency of the channel) that identifies the third communications channel; providing the second channel identification data to one or more additional participants from the plurality of participants (data provided when signal is transmitted); and receiving at least a second communication from the one or more additional participants over a fourth communications channel (column 2, lines 1-3, another channel) from the plurality of communications channels, wherein the fourth communications channel is determined based on the second channel identification data that identifies the third communications channel (inherent for a channel to have identification data, which may be the frequency of the channel).

As concerns claim 9, the method of claim 5, wherein the step of providing the channel identification data to the one or more participants comprises the computer-implemented step of: providing the channel identification data to the one or more participants over a third communications channel of the plurality of communications channels, wherein the third communications channel is not the first communications channel (column 2, lines 1-3; another channel).

As concerns claim 10, the method of claim 9, wherein at least the first communication from the one or more participants includes data that indicates the performance of the third communications channel (inherent for a transmission to include data wherein the performance can be inferred, column 2, line 42).

As concerns claim 11, the method of claim 5, wherein the step of selecting the first communications channel from the plurality of communications channels comprises the computer-implemented steps of: classifying one or more communications channels of the plurality of communications channels based upon whether the performance of the one or more communications channels satisfies at least one performance criterion (column 2, lines 1-3); and selecting the first communications channel from the one or more communications channels that are classified as satisfying the at least one performance criterion (column 2, lines 38-43).

As concerns claim 12, the method of claim 11, further comprising the computer-implemented steps of: determining a number of communications channels of the plurality of communications channels that satisfy the at least one performance criterion (column 2, lines 1-3); and if the number of communications channels that satisfy the at least one performance criterion is less than a specified number, reclassifying one or more communications channels of the plurality of communications channels (column 2, lines 55-60).

As concerns claim 13, the method of claim 5, further comprising the computer-implemented step of: determining the performance of the plurality of communications channels (column 2, lines 38-44).

As concerns claim 14, the method of claim 13, wherein the step of determining the performance of the plurality of communications channels comprises the computer-implemented steps of: sending a request for performance data to at least one participant from the plurality of participants; and in response to the request, receiving performance data from the at least one participant (column 2, lines 38-44).

As concerns claim 15, the method of claim 13, wherein the step of determining the performance of the plurality of communications channels comprises the computer-implemented step of: creating and maintaining performance data that indicates the performance of one or more communications channels of the plurality of communications channels for communications with one or more participants from the plurality of participants (column 2, lines 38-44).

As concerns claim 16, the method as recited in claim 5, wherein the one or more criteria include the failure of the first participant (column 2, lines 55-62).

As concerns claims 17 and 30, wherein: the first participant is a master participant, the second participant is a slave participant prior to being assigned to perform the one or more functions, the second participant is an associate master participant after being designated to perform the one or more functions if any of the one or more criteria are satisfied (column 1, line 60-column 2, line 4), and the one or more participants include one or more slave participants (multiple transceiver sites; column 1, line 55).

As concerns claim 18, the method of claim 17, wherein the master participant performs the steps of selecting, generating, providing, and receiving (transceiver site performs the functions for communication).

As concerns claims 19 and 31, wherein the one or more participants includes the second participant (another transceiver site, column 1, line 55).

As concerns claim 20, the method as recited in claim 5, wherein the second participant is designated by the first participant (column 2, lines 5-13).

As concerns claim 21, the method as recited in claim 5, wherein the second participant is designated by one or more participants from the plurality of participants (column 2, lines 5-13).

As concerns claim 22, a method for managing a communications system comprising a plurality of participants, comprising the computer-implemented steps of: determining the performance of a first communications channel between a first participant from the plurality of participants and one or more other participants from the plurality of participants (column 2, lines 1-3, column 2, lines 38-42, column 2, line 55); and selecting, based upon the performance of the first communications channel between the first participant and the one or more other participants, a second participant (column 2, lines 5-13) from the one or more other participants; assigning, to a third participant from the plurality of participants, one or more functions to be performed by the third participant (column 2, lines 5-13, another transceiver); and designating a fourth participant from the plurality of participants to perform the one or more functions if any of one or more handoff criteria are satisfied (column 2, lines 5-13, another transceiver).

As concerns claim 23, the method of claim 22, further comprising the computer-implemented step of: in response to any of the one or more handoff criteria being satisfied, assigning the one or more functions to the fourth participant (column 2, lines 1-13).

As concerns claim 24, the method of claim 22, wherein the step of designating the fourth participant is performed prior to a condition of the third participant that prevents the third participant from performing the one or more functions (column 2, lines 1-13).

As concerns claim 25, the method of claim 22, wherein the step of designating the fourth participant is performed prior to a failure of the third participant (column 2, lines 1-13).

As best understood concerning claim 26, the method of claim 22, wherein the first participant is the third participant (both are transceiver stations).

As concerns claim 27, the method of claim 22, wherein the one or more participants includes the fourth participant (another transceiver site).

As concerns claim 28, a first communications device comprising: an interface (transceiver, column 1, line 55) that is configured to receive data from a plurality of communications devices and to transmit data to the plurality of communications devices (mobile devices and transceiver stations); and a mechanism that is communicatively coupled to the interface and configured to: perform one or more functions (radio/cell communication, column 1, lines 49-51); prior to a failure of the communications device, designate a second communications device from the plurality of communications devices to perform the one or more functions if any of a set of criteria are satisfied (column 2, lines 1-13); select, based upon performance (column 2, lines 1-3, column 2, lines 38-42, column 2, line 55) of a plurality of communications channels, a first communications channel (a channel used for communication, column 1, line 35) from the plurality of communications channels; generate first channel identification data (inherent for a channel to have identification data, which may be the frequency of the channel) that identifies the first communications channel; provide the first channel identification data to one or more communications devices from the plurality of communications devices (provided when

transmitted); and receive at least a first communication from the one or more communications devices over a second communications channel from the plurality of communications channels, wherein the second communications channel is determined based on the first channel identification data that identifies the first communications channel (column 2, lines 1-13).

As concerns claim 32, the first communications device of claim 28, wherein the mechanism is further configured to: select, based upon the performance of the plurality of communications channels and at least one performance criterion (column 2, lines 1-3, column 2, line 43 and 55), a third communications channel from the plurality of communications channels (another channel); generate second channel identification data that identifies the third communications channel (inherent for a channel to have identification data, which may be the frequency of the channel); provide the second channel identification data to one or more additional communications devices from the plurality of communications devices (provided when transmitted); and receive at least a second communication from the one or more additional communications devices over a fourth communications channel from the plurality of communications channels, wherein the fourth communications channel is determined based on the second channel identification data that identifies the third communications channel (column 2, lines 1-13).

As concerns claim 33, the first communications device of claim 28, wherein the mechanism is further configured to: provide the channel identification data to the one or more communications devices over a specified communications channel (inherent for a channel to have identification data, which may be the frequency of the channel, provided when transmitted over a channel which can be a specified channel) of the plurality of communications channels, wherein the specified communications channel is not the first communications channel (multiple

channels available for communication, such that the specified channel can be a channel other than a first channel).

As concerns claim 34, the first communications device of claim 33, wherein at least the first communication from the one or more communications devices includes performance data (inherent for a transmission to include data wherein the performance can be inferred, column 2, line 42) that indicates the performance of the specified communications channel.

As concerns claim 35, the first communications device of claim 28, wherein the mechanism is further configured to: determine the performance of a plurality of communications channels used by the plurality of communications devices (column 2, lines 1-13; column 2, lines 38-42; column 2, line 55).

As concerns claim 36, the first communications device of claim 35, wherein the performance of the plurality of communications channels is determined based on a channel performance testing technique selected from the group consisting of a received signal strength indicator (column 2, line 42), a header error check, a cyclic redundancy check, and forward error correction.

As concerns claim 37, the first communications device of claim 28, wherein the mechanism is further configured to: classify one or more communications channels of the plurality of communications channels based upon whether the performance of the one or more communications channels satisfies at least one performance criterion (column 2, lines 1-13; column 2, lines 38-42; column 2, line 55); and select the first communications channel from the one or more communications channels that are classified as satisfying the at least one performance criterion (column 2, lines 1-13; column 2, lines 38-42; column 2, line 55).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,549,784

USPN 5,898,928

USPN 5,774,808

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Wednesday from 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John B. Walsh
Primary Examiner
Art Unit 2151